
APPENDIX E

HISTORICAL RECORDS, DATA SOURCES, AND OTHER REFERENCE MATERIAL

GENERAL

This appendix contains a more comprehensive description of the relevant port-related resource material identified in Table I-6 of the Plan. It also contains other reference material that may prove useful to the reader.

Several agencies provided pertinent information for Table I-6, relative to historical records and data sources within their control. This information will permit a better understanding of the content and applicability of the resource material and facilitate a more accurate determination of the need to obtain further details. The following files are presented by agency in the same order as Table I-6. Subsequent to the listing of these files, will be a listing of Internet sites of interest in the Port of Hampton Roads and vicinity.

Organization: National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
Hydrographic Surveys Division
Atlantic Hydrographic Branch

Location: 439 West York Street
Norfolk, VA 23510

Contact: LCDR Andrew L. Beaver, NOAA

Phone: (757) 441-6746

Fax: (757) 441-6601

File Name: Hydrographic Data in the Marine Environment

Description:

The Atlantic Hydrographic Branch coordinates the acquisition and processing of precisely located geographic data in the marine environment. Hydrographic surveys are conducted to determine the configuration of the bottoms of water bodies, especially as it pertains to navigation. This includes the detection, location, and identification of wrecks and obstructions (AWOIS) primarily through the use of side scan sonar and multibeam sonar technology. Other features important to marine navigation such as landmarks and aids to navigation are also accurately positioned. This information is critically important to the production of nautical charts and is also useful to the fishing industry and to coastal zone managers.

Assets:

The NOAA has two hydrographic survey vessels based out of Norfolk. The NOAA Ship "Rude" is a 90-foot vessel that utilizes multibeam sonar. The "Whiting" is a 163-foot vessel that also has multibeam sonar and carries 29-foot launches. All vessels are equipped with side scan sonar. In addition, the Atlantic Hydrographic Branch has one trailerable and one non-trailerable launch equipped with side scan and single beam echosounders at its disposal to cover the 24-hour side scan sonar capability.

Other Products and Services:

- Nautical charts of the Hampton Roads area
- Nautical charts in a digital raster format
- Prior hydrographic surveys, both paper and digital

Organization: National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
Ocean Products and Services Division
Field Operations Branch

Location: 808 Principal Court
Chesapeake, VA 23320

Contact: Jim Dixon

Phone: (757) 436-0200

Fax: (757) 436-9292

File Name: Oceanographic Observing Systems

Description:

The NOAA's Field Operations Branch, located in Chesapeake, is responsible for operating and providing maintenance and logistic support for all oceanographic and Great Lakes observing systems required by the Oceanographic Products and Services Division (OPSD). The Branch ensures the continuous 24-hour operation of navigation and other real-time observing systems needed to support the protection of life and property. The Branch also supports the Requirements and Engineering Branch and the Information Systems Branch to test and evaluate new observing systems and software modules, developed by these Branches and other components of the National Ocean Service, to support the OPSD and the Coast Survey mission objectives. Branch activities include, but are not limited to, the following: (1) installation, documentation, operation, and maintenance of measurement systems, such as the National Water Level Observation Network and the Physical Oceanographic Real-Time System (PORTS); (2) field reconnaissance and inspections of existing and/or potential new measurement sites such as those for property permissions and leases; (3) establishment, leveling, documentation, and inspection of National Ocean Service benchmarks; (4) field support for Coast Survey and the OPSD, cooperative, and/or reimbursable projects; (5) contract execution and administration, such as statement-of-work preparation and Contracting

Officer's Technical Representative duties, to provide for contract maintenance support; (6) and provision of training in the installation, operation, and maintenance of the OPSD observing equipment, including training required to maintain the OPSD "partnership" relationships.

Operational Tide Gauges in the Hampton Roads Area:

- | | |
|--------------------------------|----------------------|
| • Gloucester Point, York River | 37°14.8'N--76°30.0'W |
| • Sewells Point, Hampton Roads | 36°56.8'N--76°19.8'W |
| • Chesapeake Bay Bridge Tunnel | 36°58.0'N--76°06.8'W |

Organization: National Oceanic and Atmospheric Administration
National Ocean Service
National Geodetic Survey
Field Operations Branch

Location: 439 West York Street
Norfolk, VA 23510

Contact: Joe Lindsay

Phone: (757) 441-3603

Fax: (757) 441-6745

File Name: National Spatial Reference System

Description:

The National Geodetic Survey develops and maintains the National Spatial Reference System (NSRS) using advanced geodetic, photogrammetric, and remote sensing techniques. The NSRS is a consistent national coordinate system that defines latitude, longitude, height, scale, gravity, and orientation throughout the nation, as well as how these values change with time. This information is essential for ensuring the reliability of transportation, communication, and defense systems; boundary and property surveys; land record systems; mapping and charting; public utilities; coastal zone management; natural resource mapping; and a multitude of scientific and engineering applications. The National Geodetic Survey conducts the coastal mapping program, including surveying the nation's coastline and providing precise positions of the shoreline and other features that are used to construct navigational charts. The National Geodetic Survey is responsible for the photogrammetric mapping of all of the coastal regions of the United States and its possessions, and of the Great Lakes and their connecting waterways. The Field Operations Branch, located at the Atlantic Marine Center in Norfolk, conducts geodetic surveys to support shoreline mapping, nautical and aeronautical charting, and hydrography. Many of these surveys provide information that is incorporated into the National Airspace System in accordance with specifications of the Federal Aviation Administration. The Branch coordinates survey activities with other Federal, state, and

local governments having interests in particular projects. The Branch supports the NOAA's ship-based personnel by providing training in geodetic survey techniques and sometimes through performance of the surveys themselves. The Branch, through its survey units, performs control surveys, crustal motion surveys, airport obstruction surveys, navigational aid surveys, tidal datum surveys, and special purpose surveys. These functions involve the full scope of survey procedures, including global positioning system observations and differential measurements. These survey units acquire data and perform computations, data analyses, quality control, and survey adjustments using the method of least squares, before releasing the data to headquarters.

Products:

- Horizontal and vertical control information
- Aerial photography

Organization: National Oceanic and Atmospheric Administration
National Ocean Service
Office of Ocean Resources Conservation and Assessment
Hazardous Material Response and Assessment Division

Location: USCG Reserve Training Center
Yorktown, VA 23690

Contact: Gary Ott

Phone: (757) 898-2234

Fax: (757) 898-2394

File Name: Scientific Support During Spills

Description:

The Scientific Support Coordination Branch provides critical scientific support to the Federal On-Scene Coordinator during spills of oil and hazardous materials, in order to reduce the risks to coastal habitats and resources. Scientific Support Coordinators use oil spill trajectory estimates, chemical hazards analyses, and assessments of the sensitivity of resources to help the Federal On-Scene Coordinator make timely operations decisions. They also provide guidance, experience, and resources to develop spill preparedness plans that help identify the course of action that provides the greatest environmental benefit. The Branch Scientific Support Coordinators and technical advisors support the Coast Guard at marine spills of oil and hazardous materials by providing critical information on spill trajectory, chemical hazard analyses, and assessments of the sensitivity of coastal and estuarine habitats. The staff apply scientific principles to pre-event planning, spill prevention, on-scene response, operational forecasting, impact mitigation, and environmental assessment of effects of releases of oil and other hazardous substances in the marine environment. The Branch conducts research and monitoring projects to investigate the physical, biological, and chemical processes relevant to pollution incidents; the environmental consequences of mitigation techniques; spill countermeasures; and remedial activities at spills and waste sites. Current research includes investigating the long-term environmental effects of cleanup technologies used

at the "Exxon Valdez" spill. Scientists have also published guidelines on selecting appropriate mechanical equipment to counter the effects of oil spills, as well as guidelines for responding to spills in specific coastal environments, including freshwater, tropical, Arctic, and temperate climates.

Organization: U.S. Army Corps of Engineers
Norfolk District
District Library

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Lane Killam

Phone: (757) 441-7562

Fax: (757) 441-7719

File Name: Rivers and Harbors Congressional Documents

Description:

Rivers and Harbors Congressional Documents are publications that generally describe acts that define, expand, and change Corps of Engineers programs, authorities, and responsibilities regarding the management of the nation's water resources. The documents began as a series of omnibus bills in 1875. Then in 1960, the omnibus bills were combined in a series of Rivers and Harbors Flood Control Acts, the last of which was in 1970. Since 1974, the omnibus bills have been called Water Resources Development Acts. The library is open during business hours and is located on the first floor of the Norfolk District's main office, the Waterfield Building.

Organization: U.S. Army Corps of Engineers
Norfolk District
District Library

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Lane Killam

Phone: (757) 441-7562

Fax: (757) 441-7719

File Name: Annual Reports of the Corps of Engineers

Description:

Annual Reports of the Corps of Engineers are documents from 1867 to the present detailing the Corps of Engineers civil works projects, many of which are located within the Port of Hampton Roads area, that have been approved by the Congress.

Organization: U.S. Army Corps of Engineers
Norfolk District
District Library

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Lane Killam

Phone: (757) 441-7562

Fax: (757) 441-7719

File Name: Waterborne Commerce of the United States

Description:

Waterborne Commerce of the United States is a series of annual publications by the Corps of Engineers that provides statistics on the foreign and domestic waterborne commerce moved on the waters of the United States. It includes an annual summary of the amounts and kinds of commodities including data on number of vessel trips and type and drafts of vessels.

Organization: U.S. Army Corps of Engineers
Norfolk District
District Library

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Lane Killam

Phone: (757) 441-7562

Fax: (757) 441-7719

File Name: Tide Tables and Tidal Current Tables

Description:

The Tide Tables are issued annually by NOAA and include high and low water predictions for each day for 203 ports and 6,500 tidal gage stations throughout the world. These tables have been published since 1853. Similarly, the Tidal Current Tables have been published since 1890 and include the velocities of the currents.

Organization: U.S. Army Corps of Engineers
Norfolk District
District Library
Location: 803 Front Street
Norfolk, VA 23510-1096
Contact: Lane Killam
Phone: (757) 441-7562
Fax: (757) 441-7719

Description:

The Corps of Engineers has conducted a number of studies, produced numerous reports, and obtained authorization for many projects in the Port of Hampton Roads and vicinity. Several tables summarizing this data follow. Table E-1 is a listing of studies and reports, Table E-2 includes summaries of the various studies and reports, and Table E-3 is a listing of the deep-water navigation project authorizations.

Table E-1. CORPS OF ENGINEERS STUDIES AND REPORTS, THE PORT OF
HAMPTON ROADS AND VICINITY (1)

Title	Date
<ul style="list-style-type: none"> • Technical Report EL-81-11, Development of a Management Plan for Craney Island Disposal, Waterways Experiment Station 	December 1981
<ul style="list-style-type: none"> • Final Supplement I to the Final EIS and Appendix: Dam Neck Ocean Disposal Site, Site Evaluation Study, Norfolk Harbor And Channels, Virginia, Deepening and Disposal 	May 1985
<ul style="list-style-type: none"> • Main Report, Addendum to Final EIS, Final EIS; Feasibility Report, Norfolk Harbor and Channels, Virginia, Deepening and Disposal (July 1980) (authorizing document); Volume I, House Document 99-85 (99th Congress, 1st Session) 	July 1985
<ul style="list-style-type: none"> • Appendix 1, Technical Report; Feasibility Report, Norfolk Harbor and Channels, Virginia, Deepening and Disposal (July 1980) (authorizing document); Volume II, House Document 99-85 (99th Congress, 1st Session) 	July 1985
<ul style="list-style-type: none"> • Appendix 2, Public Views and Responses; Feasibility Report, Norfolk Harbor and Channels, Virginia, Deepening and Disposal (July 1980) (authorizing document); Volume III, House Document 99-85 (99th Congress, 1st Session) 	July 1985
<ul style="list-style-type: none"> • Supplemental Information Report to the Final EIS, Norfolk Harbor and Channels, Virginia, Deepening and Disposal 	April 1986
<ul style="list-style-type: none"> • Main Report, General Design Memorandum 1, Norfolk Harbor And Channels, Virginia 	June 1986
<ul style="list-style-type: none"> • Appendix A, Hydrodynamics, General Design Memorandum 1, Norfolk Harbor and Channels, Virginia 	June 1986
<ul style="list-style-type: none"> • Appendix B, Surveying and Mapping, General Design Memorandum 1, Norfolk Harbor and Channels, Virginia 	June 1986
<ul style="list-style-type: none"> • Appendix C, Geology and Soils (in 5 volumes), General Design Memorandum 1, Norfolk Harbor and Channels, Virginia 	June 1986

Table E-1. CORPS OF ENGINEERS STUDIES AND REPORTS, THE PORT OF
HAMPTON ROADS AND VICINITY
(Cont'd)

Title	Date
• Appendix D, Channel Design and Simulation Studies, General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	June 1986
• Appendix E, Anchorage Design Studies, General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	June 1986
• Appendix F, Tunnel Cover Design Studies, General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	June 1986
• Appendix G, Economic Analysis, General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	June 1986
• 50-Foot Outbound Element, Supplemental Engineering Report to General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	June 1986
• Final Report, Effects of Norfolk Harbor Deepening on Management of Craney Island Disposal Area, Waterways Experiment Station	1987
• Sections 933 and 934 Reevaluation Report, Virginia Beach Nourishment, Virginia Beach, Virginia	December 1987
• Section 933 Evaluation Report, Cape Henry Channel Sand at East Ocean View, Norfolk, Virginia	December 1987
• 55-Foot Outbound Element, Supplemental Engineering Report to General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	June 1989
• Draft Report, Site Operations and Monitoring Report 1980 to 1987, Waterways Experiment Station	February 1989
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Resort Strip, Virginia Beach, Virginia	August 1989
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Yorktown Beach, Yorktown, Virginia	August 1989

Table E-1. CORPS OF ENGINEERS STUDIES AND REPORTS, THE PORT OF
HAMPTON ROADS AND VICINITY
(Cont'd)

Title	Date
• 55-Foot Outbound Element, Revised Supplemental Engineering Report to General Design Memorandum 1, Norfolk Harbor and Channels, Virginia	September 1989
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Salt Ponds Beach, Hampton, Virginia	October 1989
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, White Marsh Beach, Hampton, Virginia	October 1989
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Grandview Beach, Hampton, Virginia	October 1989
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Buckroe Beach, Hampton, Virginia	December 1989
• Main Report, Long-Term Disposal (Inner Harbor), Draft Information Report, Norfolk Harbor and Channels, Virginia	June 1990
• Appendix A, Engineering, Design, and Cost Estimates; Long-Term Disposal (Inner Harbor), Draft Information Report, Norfolk Harbor and Channels, Virginia	June 1990
• Appendix B, Geotechnical Investigations, Long-Term Disposal (Inner Harbor), Draft Information Report, Norfolk Harbor and Channels, Virginia	June 1990
• Appendix C, Economic Studies and Appendix D, Real Estate Studies; Long-Term Disposal (Inner Harbor), Draft Information Report, Norfolk Harbor and Channels, Virginia	June 1990
• Appendix E, Environmental Information Report, Long-Term Disposal (Inner Harbor), Draft Information Report, Norfolk Harbor and Channels, Virginia	June 1990
• Appendix F, Public Involvement, Long-Term Disposal (Inner Harbor), Draft Information Report, Norfolk Harbor and Channels, Virginia	June 1990

Table E-1. CORPS OF ENGINEERS STUDIES AND REPORTS, THE PORT OF
HAMPTON ROADS AND VICINITY
(Cont'd)

Title	Date
• Draft Executive Summary, Long-Term Dredged Material Management (Inner Harbor), Norfolk Harbor and Channels, Virginia	June 1990
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Ocean Park Beach, Virginia Beach, Virginia	July 1990
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Sandbridge Beach, Virginia Beach, Virginia	August 1990
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Willoughby Spit Area, Norfolk, Virginia	August 1990
• Section 933 Evaluation Report, Thimble Shoal and Atlantic Ocean Channels, Central Ocean View Beach, Norfolk, Virginia	March 1991
• Final Supplement, Long-Term Dredged Material Management (Inner Harbor), Norfolk Harbor and Channels, Virginia	May 1992
• Final EIS for the Designation of an Ocean Dredged Material Disposal Site Located Offshore, Norfolk, Virginia, Prepared by the EPA	November 1992
• The Ports of Hampton Roads and Ports on the James and York Rivers, Virginia, Port Series #11, Navigation Data Center, Water Resources Research Center	1993
• Lower Bay Beneficial Uses of Dredged Material, Long-Term Dredged Material Management, Draft Information Report to The Commonwealth of Virginia and the Virginia Port Authority, Norfolk Harbor and Channels, Virginia	July 1994
• Limited Reevaluation Report, Norfolk Harbor and Channels, Virginia, 50-Foot Anchorage Project	May 1996 Revised July 1996

Table E-1. CORPS OF ENGINEERS STUDIES AND REPORTS, THE PORT OF
HAMPTON ROADS AND VICINITY
(Cont'd)

Title	Date
<ul style="list-style-type: none"> • Section 905(b) Water Resources Development Act of 1986 Analysis (Reconnaissance Report), Elizabeth River Environmental Restoration Study, Elizabeth River Basin, Virginia 	August 1997
<ul style="list-style-type: none"> • Shallow Draft Navigation in the Commonwealth of Virginia 	February 1998
<ul style="list-style-type: none"> • Final Report, Norfolk Harbor and Channels, Virginia, Evaluation of Sediment Test Results for the Norfolk Harbor 40-Foot Channel 	May 1998
<ul style="list-style-type: none"> • Final Report, Norfolk Harbor and Channels, Virginia, Evaluation of Sediment Test Results for the Southern Branch 	August 1998
<ul style="list-style-type: none"> • Section 905(b) Water Resources Development Act of 1986 Analysis (Reconnaissance Report), Norfolk Harbor and Channels, Eastward Expansion of Craney Island, Portsmouth, Virginia 	September 1998
<ul style="list-style-type: none"> • Dredging Master Plan, City of Norfolk, Virginia 	March 1999
<p>(1) Unless otherwise noted, the study/report was accomplished by Norfolk District and may be referenced in the Norfolk District Library.</p>	

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Organization: U.S. Army Corps of Engineers
Norfolk District
Waterways and Ports Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Richard L. Klein

Phone: (757) 441-7243

Fax: (757) 441-7664

File Name: Project Map Files

Description:

The Norfolk District's project map files are located in the library. The files contain the original survey drawings, organized chronologically by project in flat file map drawers. Various types of surveys of the channels, anchorages, and other project features are included, such as condition surveys, reconnaissance surveys, plans for dredging, before dredging surveys, and after dredging surveys. Each original survey drawing is assigned a unique file number. The projects and file number prefixes pertinent to the Norfolk Harbor and Channels projects in Hampton Roads are as follows:

<u>Project</u>	<u>Norfolk District File Number Prefix</u>
• Anchorages (Hampton Roads general)	H-11-20
• Chesapeake Bay Bridge and tunnel	H-10-22
• Entrance channel	H-51-25
• Craney Island	H-10-13
• Dam Neck disposal	H-31-10
• Elizabeth River	
• Eastern Branch	H-12-14
• Southern Branch	H-14-10
• Western Branch	H-11-14
• 35-Foot channel (Southern Branch)	H-13-10
• Fort Norfolk	H-12-13
• Hampton Roads general	H-11-20
• Newport News Channel	H-10-11
• Norfolk harbor	
• 40-, 45-, and 50-Foot channel	H-10-10
• General	H-30-10
• Scotts Creek, Elizabeth River	H-11-15
• Southern Branch, Elizabeth River	H-13-10
• Thimble Shoal Channel	H-23-11

Organization: U.S. Army Corps of Engineers
Norfolk District
Waterways and Ports Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Richard L. Klein

Phone: (757) 441-7243

Fax: (757) 441-7664

File Name: Dredging Schedules

Description:

Dredging schedules for the current year are provided by way of the Corps of Engineers Navigation Data Center Dredging Program at <http://www.wrsc.usace.army.mil/ndc/dredge.htm>. This source also provides data on waterborne commerce and port facilities.

Organization: U.S. Army Corps of Engineers
Norfolk District
Planning Branch
Environmental Analysis Team

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Thomas A. McCarthy

Phone: (757) 441-7028

Fax: (757) 441-7646

File Name: National Environmental Policy Act (NEPA) Documents

Description:

The Environmental Analysis Team provides comprehensive environmental evaluations for proposed Corps of Engineers water resource development projects. Products from the Environmental Analysis Team generally take the form of a NEPA document, such as Environmental Impact Statements, Environmental Assessments, Records of Decision, and Findings of No Significant Impact. Hard copies of all reports resulting from environmental resource investigations performed as part of planning studies can be found in the Environmental Analysis Team files. Environmental analysis encompasses both "with" and "without" project alternatives and typically addresses the following issues:

- Wetlands
- Aquatic resources
- Biological resources
- Historical resources
- Cultural resources
- Hazardous, Toxic, and Radioactive Waste
- Aesthetic resources
- Soils

- Water and sediment quality
- Endangered species
- Air quality
- Noise
- Social impacts
- Mitigation and monitoring plan
- Compliance with environmental Federal statutes and executive orders

Organization: U.S. Army Corps of Engineers
Norfolk District
Planning Branch
Environmental Analysis Team

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Helene Haluska

Phone: (757) 441-7008

Fax: (757) 441-7646

File Name: Cultural Resource Reports

Description:

Hard copies of all reports resulting from cultural resource investigations performed as part of planning studies can be found in the Environmental Analysis Team files. These reports consist of two types of reports: (1) background historical research and (2) results of field investigations. Copies of these reports can also be found at the Virginia Department of Historic Resources.

Organization: U.S. Army Corps of Engineers
Norfolk District
Regulatory Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Craig Jones

Phone: (757) 441-7070

Fax: (757) 441-7678

File Name: Regulatory Branch Permit Database

Description:

This file contains all permit requests from 1990 to the present with specific information on the project manager, type of work proposed, date of completion, issuance of public notice, and final outcome of the permit process. This record can be utilized to search for previous permit requests at a particular location or for other activities within a specific area or waterway. The electronic database can be referenced by latitude and longitude, waterway, or applicant name.

Organization: U.S. Army Corps of Engineers
Norfolk District
Regulatory Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Susan Schrader

Phone: (757) 441-7652

Fax: (757) 441-7678

File Name: Regulatory Branch Permit Records

Description:

This file contains all permits issued by the Norfolk District for work in waters of the United States and wetlands associated with Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act. There are both hard copies and microfiche versions of all permits issued prior to 1989 available from the Regulatory Branch and an electronic database that contains copies of all permits issued from 1989 to the present.

Organization: U.S. Army Corps of Engineers
Norfolk District
Regulatory Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Willie Ricks or John Evans

Phone: (757) 441-7580 or 7794

Fax: (757) 441-7678

File Name: Aerial Photographs

Description:

This file contains low level black and white and color aerial photographs of various portions of the Commonwealth of Virginia that are useful in the interpretation of construction activities within various localities. These photographs are available for the years 1977, 1978, 1979, 1982 and 1985 in 1:12,000 scale. In addition, there are low level color infrared photographs available for the area from the years 1990 and 1994/1995 in 1:40,000 scale. These photographs may be reviewed at the District office by calling the above contacts.

Organization: U.S. Army Corps of Engineers
Norfolk District
Operations Support and Readiness Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Tom Friberg

Phone: (757) 441-7645

Fax: (757) 441-7322

File Name: Dredging Report of Operations

Description:

Dredging Report of Operations are completed for all the dredging projects performed by the Norfolk District. The reports from the 1960's to 1983 are available in paper copy only, from 1983 and 1994 they are computerized on "Microsoft Excel," and from 1994 to the present they are computerized on "Filemaker Pro." The data on the Report of Operations include the following:

- Dredging project name, depth, and location
- Bid and contract numbers
- Important dates, including bid date, award date, notice to proceed date, and start and completion dates
- Work performance based on contractor daily reports
- Dredge information, including attending plant
- Distribution of dredging time in minutes
- Survey results
- Bid results

Organization: U.S. Army Corps of Engineers
Norfolk District
Operations Support and Readiness Branch

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Tom Friberg

Phone: (757) 441-7645

Fax: (757) 441-7322

File Name: Craney Island Dredged Material Database

Description:

The Craney Island Dredged Material Database was created with the software "Filemaker Pro." The database can be used to sort or find data by any parameter. The parameters in the database include the following:

- The permittee or user of Craney Island, including their address
- The contractor who performed the dredging
- The location where the dredging took place
- The permit number, including the date and expiration date of the permit
- The deposit or contract number
- The dates dredging was performed
- The cubic yards of material dredged and the toll paid for disposal into Craney Island
- Where the material was placed at Craney Island--in which cell or in the rehandling basin
- The type of dredging performed--maintenance, new work, or permit dredging
- The type of user--commercial, other Federal agencies, or the Corps of Engineers

Organization: U.S. Army Corps of Engineers
Norfolk District
Real Estate Division

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Robert P. Turner or Dillard H. Horton, Jr.

Phone: (757) 441-7733 or 7735

Fax: (757) 441-7437

File Name: Real Estate Management Information System

Description:

In general, the Real Estate Division coordinates the acquisition, management, and disposal of real property and real property interest along the Intracoastal Waterways in southeastern Virginia and northeastern North Carolina. In addition to the Intracoastal Waterways, Real Estate Division also handles real property transactions for civil works projects in Virginia and the Army and Air Force bases and Corps of Engineers facilities in the Commonwealth of Virginia, with the exception being the area around Washington, D.C.--the Capitol Region. Real Estate Division is the official real estate record holder for these installations and projects.

This particular file is an automated database with information of the various real estate projects, as well as information on all outgrants to others, such as leases, easements, licenses, and permits.

Organization: U.S. Army Corps of Engineers
Norfolk District
Real Estate Division

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Robert P. Turner or Dillard H. Horton, Jr.

Phone: (757) 441-7733 or 7735

Fax: (757) 441-7437

File Name: Real Estate Project Maps

Description:

This file includes Mylar hard copies and microfilm of various active, as well as former, Army and civil corks sites, which are available for review. These maps and drawings show acreage, estate acquired, when, from whom, how the parcel was acquired, information on any disposals, and general information.

Organization: U.S. Army Corps of Engineers
Norfolk District
Real Estate Division
Location: 803 Front Street
Norfolk, VA 23510-1096
Contact: Robert P. Turner or Dillard H. Horton, Jr.
Phone: (757) 441-7733 or 7735
Fax: (757) 441-7437

File Name: Real Estate Historical Files

Description:

These are the official records showing how and when the Federal Government acquired certain easements, fees, and other interests in real property for civil works projects, Army and Air force Bases, Army Reserve Centers, and other defense agencies. Also included in these files are the acquisition and disposal records for Fort Norfolk and Craney Island, which are a part of the Port of Hampton Roads. These records are hard copy files, with some records dating back to the Revolutionary War. The files are divided as follows:

- I. Acquisition Documents, Exhibit A. Deeds and other acquisition papers and instruments.
- II. Disposal Documents, Exhibit B. Quit claim deeds or transfer papers and other documents in chronological order pertaining to property disposal actions. These are considered to be permanent records.
- III. Jurisdiction, Exhibit C. All papers relating to the extent of Federal jurisdiction over the land acquired by the United States for military purposes or civil works purposes within several states.

- IV. Relocation, Exhibit D. All papers of a permanent value relating to relocations such as utilities, roads, closing or vacation documents, and cemetery relocations.
- V. Miscellaneous, Exhibit E. Contains extra sheets relating to claims arising out of the use and occupancy of regulations under which processed and final disposition. This section also used to file papers or documents that do not clearly belong under any of the preceding exhibits.
- VI. Final Project Map, Exhibit F. A folded print of the final project map.

Historical files are available for the following specific projects associated with the with the Port of Hampton Roads:

- Atlantic Intracoastal Waterway, Atlantic and Chesapeake Canal
- Atlantic Intracoastal Waterway, Dismal Swamp Canal
- Atlantic Intracoastal Waterway, North Landing River
- Camp Pendleton
- Fort Eustis
- Fort Monroe
- Fort Norfolk
- Fort Story
- Langley Air Force Base
- Nansemond Disposal Area
- Norfolk Harbor, Craney Island

Organization: U.S. Army Corps of Engineers
Norfolk District
Real Estate Division

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Robert P. Turner or Dillard H. Horton, Jr.

Phone: (757) 441-7733 or 7735

Fax: (757) 441-7437

File Name: Real Estate Project Cooperation Agreement Files

Description:

These files include hard copy Real Estate Division records of the Norfolk District's joint ventures with cities, counties, and/or the Commonwealth for cost-shared project for flood protection, dredging, environmental enhancement, etc. These files are divided into the following sections for these civil works projects:

- I. Project Authorizations. Reconnaissance reports, feasibility studies, phase I and II documents, authoring legislation, and/or original authentic copies of approval correspondence.
- II. 221 Contracts. Authorizing documents, ordinance, and resolutions.
- III. Permanent Real Estate Records. Deeds, real estate maps, and title papers.
- IV. Miscellaneous. Correspondence, permits, maps, etc., for original work.
- V. Inspection Reports. Reports and correspondence related to remedial work.
- VI. Maintenance Work (Year). Complete with all correspondence, maps, permits, etc.

Project Cooperation Agreement files are available for the following specific projects associated with the with the Port of Hampton Roads:

- Anderson Park Shoreline Protection, Newport News
- Atlantic Ocean Channel
- Bennetts Creek
- Channel Connecting York River with Back Creek to Slaights Wharf
- Channel from Phoebus
- Channel to Newport News
- Deep Creek, Newport News
- Hampton Creek
- Hampton Institute Shoreline Protection
- James River
- Jamestown Park Shoreline Protection
- Lafayette River
- Little River (Creek)
- Lynnhaven Inlet
- Mattaponi River
- Nandua Creek
- Nansemond River
- Newport News Creek
- Norfolk Harbor
- Norfolk Local Flood Protection
- Portsmouth Harbor, Channel to Nansemond Ordnance Depot
- Rudee Inlet
- Thimble Shoal Channel
- Virginia Beach Canal Number 2
- Virginia Beach Erosion Control and Hurricane Protection
- Willoughby Channel
- Willoughby Spit Beach Erosion Control and Hurricane Protection

Organization: U.S. Army Corps of Engineers
Norfolk District
Real Estate Division

Location: 803 Front Street
Norfolk, VA 23510-1096

Contact: Robert P. Turner or Dillard H. Horton, Jr.

Phone: (757) 441-7733 or 7735

Fax: (757) 441-7437

File Name: Real Estate Defense Environmental Restoration Files

Description:

These hard copy files are listed by randomly assigned numbers and contain information on formerly owned or used defense sites in Virginia between World War I and the mid 1990's. Many of these sites were located in or near the Port of Hampton Roads area. Defense Environmental Restoration files are available for the following specific projects associated with the with the Port of Hampton Roads:

- Animal Embarkation Depot, C03VA106700
- Camp Casino, C03VA106800
- Camp Hill, C03VA006900
- Camp Patrick Henry Laundry, C03VA003700
- Cape Charles Air Force Station Bunkers, C03VA003100
- Chesapeake Bay Search Light Station, C03VA003600
- Coastal Artillery School, C03VA105500
- Debarkation Hospital, C03VA007100
- Embarkation Hospital, C03VA007200
- Engineers Depot, C03VA006600
- Fisherman Island National Wildlife Refuge, CO3VA008100
- Ford Plant, C03VA004000
- Fort Eustis, C03VA002900

- Fort Story, C03VA003200
- Fort Wool, C03VA010300
- Fuel Depot Yorktown, C03VA099800
- Gilmerton Lumber Storage Yard, C03VA107200
- Lambert Point Guard Barracks, C03VA006700
- Langley Air Force Base, Advance Defense Continental Missile Facility,
C03VA011100
- Langley Air Force Base, C03VA103900
- Lynnhaven Fire Control Station, C03VA011700
- Mine Wharf, C03VA103200
- Mining Casement, C03VA105000
- Nansemond Ordnance Depot, C03VA004600
- Naval Station, C03VA026600
- Naval Supply Center, Cheatham Annex, C03VA027500
- Norfolk Naval Air Station, C03VA027700
- Norfolk Naval Ship Yard, C03VA026400
- Plume Tree Island Range, C03VA020201
- Port Medical Supply, C03VA106100
- Quarter Masters Depot, C03VA007400
- Saint Helena, Norfolk Naval Ship Yard, C03VA028700
- Ship Shoal and Godwin Island, C03VA014800
- Submarine Mine Defense, C04VA105100
- Torpedo Defense, C03VA104900
- Transportation Service School, C03VA106200
- Virginia State Fuel Farm, C03VA027400
- Warehouse Group Numbers 2 and 3, C03VA007600

Organization: U.S. Maritime Administration
South Atlantic Region
Regional Maritime Programs

Location: Room 211, Building 4D
7737 Hampton Boulevard
Norfolk, VA 23505

Contact: L. Frank Mach

Phone: (757) 441-6393

Fax: (757) 440-0812

Description:

The Maritime Administration has published numerous reports concerning its activities and responsibilities. These reports are listed as follows by category:

GENERAL

- Annual Report of the Maritime Administration, Fiscal Year 1996. Prepared by the Maritime Administration, phone (202) 366-5807
- A Shipper's Guide for Proper Stowage of Intermodal Containers for Ocean Transport. Prepared by the Maritime Administration, phone (202) 366-4357
- Environmental Advantages of Inland Barge Transportation. Prepared by the Maritime Administration, phone (202) 366-4357
- Foreign Flag Merchant Ships Owned by U.S. Parent Companies. Prepared by the Maritime Administration, phone (202) 366-2267
- Glossary of Shipping Terms. Prepared by the Maritime Administration, phone (202) 366-4357

- Introducing the Maritime Administration. Prepared by the Maritime Administration, phone (202) 366-5807
- MARAD Publications, Fiscal Year 1997. Prepared by the Maritime Administration, phone (202) 366-5807
- Marine Fire Prevention--Fire Fighting and Fire Prevention. Prepared for the Maritime Administration, Government Printing Office Stock Number 003-007-00099-5, phone (202) 512-1800
- Maritime Subsidies. Prepared by the Maritime Administration, phone (202) 366-5773
- Merchant Fleets of the World--Oceangoing Steam and Motor Ships of 1,000 Gross Tons and Over. Prepared by the Maritime Administration, phone (202) 366-2267
- Outlook for U.S. Shipbuilding and Repair Industry. Prepared by the Maritime Administration, phone (202) 366-5841
- Report on Foreign Shipbuilding. Prepared by the Maritime Administration, phone (202) 366-5841
- Report on Survey of U.S. Shipbuilding and Repair Facilities. Prepared by the Maritime Administration, phone (202) 366-5841
- U.S. Exports and Imports Transshipped via Canadian Ports, Fiscal Year 1995. Prepared by the Maritime Administration, phone (202) 366-2267. Also available via e-mail: Robert_Christensen@Postmaster1.dot.gov

- Vessel Inventory Report. Prepared by the Maritime Association, phone (202) 366-2267
- Vessel Inventory Report (United States Dry Cargo and Tanker Fleets 1,000 Gross Tons and Over), Quarterly Report. Prepared by the Maritime Administration, phone (202) 366-2267

FLEET AND VESSEL MANAGEMENT SYSTEMS, PLANNING, AND TECHNOLOGY

- An Assessment of Rail and Container-Handling Capabilities at Defense Logistics Agency Depots. Prepared by Leeper, Cambridge, and Campbell, Inc. National Technical Information Service Number PB91-183970/AS--A09, phone (703) 487-4650
- Development in Surface Fairing Procedures. Prepared by the University of New Orleans. National Technical Information Service Number PB90-216938/AS--A05, phone (703) 487-4650
- Development of Analysis of Alternatives for Expanding U.S. Ship Repair Capacity to Meet National Defense Mobilization Requirements. Prepared by Booz, Allen, and Hamilton. National Technical Information Service Number PB91-135491/AS--A08, phone (703) 487-4650
- Maintenance and Repair of RRF Propulsion Boilers and Diesel Engines. Prepared by Seaworthy Systems, Inc. National Technical Information Service, phone (703) 487-4650
 - Volume I, Final Report. National Technical Information Service Number PB91-168658--A04
 - Volume II, Appendices. National Technical Information Service Number PB91-168666--A08

- Probability Based Inspection Planning for Marine Structures. Prepared by the University of California. National Technical Information Service Number PB94-125853--A04, phone (703) 487-4650
- Shipboard Crew Fatigue, Safety and Reduced Manning. Prepared by Volpe National Transportation Center. National Technical Information Service Number PB91-138099--A06, phone (703) 487-4650
- Worldwide Vessel Locating and Tracking System, Volume 1: Final Report. Prepared by Synetics Corporation. National Technical Information Service Number PB93-193217--A11, phone (703) 487-4650

LABOR, TRAINING, AND SAFETY

- Information Concerning Employment and Training Opportunities in the U.S. Merchant Marine. Prepared by the Maritime Administration, phone (202) 366-5755
- Marine Fire Protection--Fire Fighting and Fire Safety, January 1980, 388 pages. Prepared by the Maritime Administration, Government Printing Office Stock Number 003-007-000099-5, \$14.00, phone (202) 512-1800
- Maritime Labor-Management Affiliations Guide. Prepared by the Maritime Administration, phone (202) 366-5755

PERSONNEL AND TRAINING

- Admission Procedures and General Information, United States Merchant Marine Academy, Kings Point, NY, phone (202) 366-5755. Interested Parties may also write to the Office of Labor, Training, and Safety; Maritime Administration; Washington, D.C. 20590 for copies of the admission booklets.

PORT AND INTERMODAL DEVELOPMENT

- An Analysis of U.S. Public Port Profitability and Self-Sufficiency, 1985 to 1994. Prepared by the Maritime Administration, phone (202) 366-4357
- An Assessment of Port, Terminal, and Navigation Impacts Resulting from the 1993 Upper Mississippi River Flood. National Technical Information Service Number PB97-171532--A06, phone (703) 487-4650
- A Report to Congress on the Public Ports of the United States, 1992 to 1993. Prepared by the Maritime Administration, phone (202) 366-4357
- A Shipper's Guide to Stowage of Cargo in Marine Containers. Prepared by the Maritime Administration, phone (202) 366-5807
- Development of an Inland Waterway Information System, Final Report. Prepared by Memphis State University. National Technical Information Service Number PB95-166336--A06, phone (703) 487-4650
- Inventory of American Intermodal Equipment, 1994. Prepared by the Maritime Administration, phone (202) 366-4357
- Maritime Security Report. Prepared by the Maritime Administration, phone (202) 366-4357
- National Port Readiness Network. Prepared by the Maritime Administration, phone (202) 366-4357
- Port Handbook for Estimating Marine Terminal Cargo Handling Capacity. Prepared by Mofatt and Nichols Engineers. National Technical Information Service, phone (703) 487-4650

- Volume I, Executive Summary. National Technical Information Service Number PB87-121133/AS--A03
- Volume II, Main Report. National Technical Information Service Number PB87-121125/AS--A08
- Port Risk Management Guidebook. Prepared by the Maritime Administration, phone (202) 366-4357
- Prevention of Air Pollution from Ships; Characterization and Assessment of Diesel Particulate via Lube Oil Consumption Control. National Technical Information Service Number PB97-172779, phone (703) 487-4650
- Report to Congress on the Status of the Public Ports of the United States. Prepared by the Maritime Administration, phone (202) 366-4357
- Resolution of Land Use and Port Access Conflicts at Inland Waterway Ports. National Technical Information Service Number PB96-188396--A06, phone (703) 487-4650
- The U.S. Stevedoring and Marine Terminal Industry. Prepared by the Maritime Administration, phone (202) 366-4357
- U.S. Port Development Expenditure Survey. Prepared by the Maritime Administration, phone (202) 366-4357

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: October 1992 Condition Survey

Description:

This file is a condition survey by the Corps of Engineers for the Little Creek navigation channel project. It shows the dredged depths of the entrance channel, the harbor, and the piers.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: April 1995 Condition Survey

Description:

This file is a condition survey by the Public Works Center for the Little Creek navigation channel and berthing areas. It shows the dredged depths of the entrance channel, the quaywall, Piers 11 to 15 and their approaches, and Piers 16 North to 19 and their approaches.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: June 1996 Condition Survey

Description:

This file is a condition survey by the Public Works Center for the Little Creek navigation channel and berthing areas. It shows the dredged depths of Pier 14 North and its approach areas.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: Spring 1998 Condition Survey

Description:

This file is a condition survey by the Public Works Center for the Little Creek navigation channel and berthing areas. It shows the dredged depths of the entrance channel, the quaywall, and the piers.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: Military Construction Project P-100

Description:

This file is a report entitled Military Construction Project P-100, Dredge Little Creek Channel, dated May 1995. It proposes the dredging of the harbor and channel to 25 feet, plus 1 foot over dredge.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Environmental Quality Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: M. Connor

Phone: (757) 464-7063

Fax: (757) 464-7898

File Name: Environmental Assessment for Military Construction Project P-100

Description:

This file is the Environmental Assessment, dated Spring 1998, for Military Construction Project P-100, Dredge Little Creek Channel.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Environmental Quality Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: K. Greaser

Phone: (757) 462-4571

Fax: (757) 464-7898

File Name: Initial Assessment Study of NAB LCREEK (NEESA 13-066)

Description:

This file is a report entitled Initial Assessment Study of NAB LCREEK (NEESA 13-066), dated December 1984. It provides core samples of Little Creek Cove.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: History of Harbor Dredging Events

Description:

This file is a report entitled History of Harbor Dredging Events. It identifies critical decision milestones for determining entrance channel depths in support of the LSD-41 class ships.

Organization: U.S. Navy
Little Creek Naval Amphibious Base
Base Civil Engineers Office
Planning Office

Location: Suite 100
2600 Tarawa Court
Norfolk, VA 23521-3229

Contact: Al Siegler

Phone: (757) 462-4733

Fax: (757) 464-7898

File Name: NAVPHIBASE LCREEK Dredging History of 1995

Description:

This file is a report entitled NAVPHIBASE LCREEK Dredging History of 1995. It provides a chronological listing of dredging events from 1947 to present day, approved maintenance dredging depths, datum plane diagrams, and LANTDIV's 1988 dredging study showing maximum allowable dredge depths at piers and quaywall.

Organization: U.S. Navy
Norfolk Naval Base
Navy Public Works Center
Hydrographic Survey Branch (Code 411)

Location: 9742 Maryland Avenue
Norfolk, VA 23511-3095

Contact: Frank Cole

Phone: (757) 444-3765

Fax: (757) 445-1924

File Name: Hydrographic Surveys

Description:

The Hydrographic Survey Branch routinely conducts hydrographic surveys to determine bottom configurations at naval harbors and berthing areas in the Hampton Roads area. These surveys are condition surveys used in the preparation of contract documents for dredging contracts. Surveys are also performed immediately before and after dredging operations to monitor dredging contractor performance. Surveys are also made occasionally to detect, locate, and identify submerged objects. Surveys are made at the following locations: (1) Naval Station, Norfolk; (2) Naval Amphibious Base, Little Creek; (3) Norfolk Naval Shipyard; (4) Craney Island Fuel Depot; (5) Naval Weapons Station, Yorktown; and (6) Cheatham Annex.

Assets:

Three hydrographic survey boats are based at the Norfolk Naval Base. A 25-foot work-boat, a 24-foot work-boat, and a 20-foot work-boat are all available to perform hydrographic surveys. Differential Global Positioning System, Electronic Range Azimuth, and manual tag line surveys are methods employed in conducting hydrographic surveys.

Other Products and Services:

- Prior hydrographic surveys, both paper and digital
- Horizontal and vertical control

Organization: U.S. Navy
Norfolk Naval Shipyard
Facility Planning (914.3)
Location: Portsmouth, VA 23709-5000
Contact: Chris Ceniccola
Phone: (757) 396-8240
Fax: (757) 396-8233

File Name: Hydrographic Surveys

Description:

Norfolk Naval Shipyard performs periodic depth sounding in areas such as berths, wet slips, and barge slips to determine if any dredging is required. Data collected during these soundings include: (1) current depth, (2) quantity to be dredged (if necessary), (3) limited information on material composition, and (4) a survey map. Norfolk Naval Shipyard has limited information dating back to 1970's, but little prior to that.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office

Location: 5636 Southern Boulevard
Virginia Beach, VA 23462

Contact: Roger Everton (Water Quality Monitoring)

Phone: (757) 518-2150

Fax: (757) 518-2003

Contact: Kevin A. Curling (Water Quality Assessments)

Phone: (757) 518-2155

Fax: (757) 518-2123

File Name: Water Quality Monitoring and Water Quality Assessments

Description:

The Tidewater Regional Office maintains a network of water quality monitoring sites throughout the region. Several of these sites are located within the Port of Hampton Roads area. These sites are routinely monitored for "conventional" water quality parameters: (1) temperature, (2) salinity, (3) dissolved oxygen, (4) pH, (5) biological oxygen demand, (6) nutrients (nitrogen/phosphorus), (7) solids (residue), and (8) fecal coliform bacteria. All monitoring sites are sampled at least once a quarter; certain areas and sites are sampled monthly. On a variable basis, water samples are also analyzed for metals and certain pesticides/organics (polyaromatic hydrocarbons, polychlorinated biphenyls, etc.). Water samples collected in the Elizabeth River are also analyzed for tributyl tin. Sediment samples are collected at certain sites once every 3 years and are analyzed for metals and organics.

Biological monitoring also occurs within the region. Benthic habitat is monitored and assessed by noting the robustness of the biological community present. The DEQ also maintains a network of fish sampling sites throughout the state where fish are collected and the tissue is analyzed for metals and organics.

All data collected are stored in EPA's STORET database. Access to STORET is through this office or can also be acquired through after-market private sources. Also, every 2 years, the state produces a 305(b) Water Quality Assessment of Virginia's Waters and a 303(d) List of Priority Waters. The DEQ also publishes monitoring data bulletins that report and summarize all data collected.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office
Location: 5636 Southern Boulevard
Virginia Beach, VA 23462
Contact: Robert F. Jackson
Phone: (757) 518-2113
Fax: (757) 518-2123

File Name: Virginia Water Protection Permits

Description:

The Virginia Water Protection Permit program is required under Section 401 of the Clean Water Act and was subsequently modified by the State Water Control Law. The State Water Control Law reads in part, "...proposed activity is consistent with the provisions of the Clean Water Act and will protect instream beneficial uses. The preservation...for the purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is a beneficial use of Virginia's waters."

Activities that are regulated by the Virginia Water Protection Permit program include, but are not limited to: (1) dredging, (2) impoundments, (3) structures in surface waters, (4) water supply intakes, (5) marinas, (6) channels, and (7) hydraulic modifications. Specific cases of these activities could be the following: (1) private piers and wharves, (2) boathouse marinas, (3) dolphin/mooring piles, (4) boat ramps, (5) bulkheads/riprap and associated backfill, (6) fill, (7) marsh stabilization, (8) dredging/excavating, (9) groins/jetties/breakwaters, (10) beach nourishment, (11) intake/outfall structures, (12) channel modifications, (13) impoundments/dams, (14) utility crossings, and (15) road crossings. All Virginia Water Protection Permit information is entered and stored in the DEQ's Comprehensive Environmental Data System.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office

Location: 5636 Southern Boulevard
Virginia Beach, VA 23462

Contact: Bob Goode

Phone: (757) 518-2110

Fax: (757) 518-2123

File Name: Point Source Control Programs

Description:

The discharge of pollutants from point sources is controlled by the Virginia Pollution Discharge Elimination System Permit Program, the Toxic Management Program, and the Pretreatment Program. The Virginia Pollution Abatement Program addresses facilities that handle waste or wastewaters but do not discharge to state waters. These programs were established and are designed to monitor and limit the discharge of conventional and toxic pollutants into state waters. Compliance with designated permit limits or monitoring requirements is tracked by the Compliance Auditing System, which is administered by the DEQ's Office of Enforcement. All point source permit information is entered and stored in the DEQ's Comprehensive Environmental Data System.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office

Location: 5636 Southern Boulevard
Virginia Beach, VA 23462

Contact: Dave Borton

Phone: (757) 518-2118

Fax: (757) 518-2009

File Name: Groundwater Protection Programs

Description:

Groundwater in Virginia is protected and maintained by several programs. These include Ground Water Quality Monitoring, Underground Water Withdrawal Permit Program, Underground Storage Tank Program, Above Ground Storage Tank Program, and the Leaking Underground Storage Tank Program. These programs are designed to regulate the listed types of facilities. Regulations provide for groundwater monitoring, leak detection, inspection, spill control, and remediation of pollutant leaks. All groundwater information is entered and stored in the DEQ's updated Comprehensive Environmental Data System.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office

Location: 5636 Southern Boulevard
Virginia Beach, VA 23462

Contact: Harold Winer

Phone: (757) 518-2153

Fax: (757) 518-2003

File Name: Solid and Hazardous Waste Program

Description:

Solid and hazardous wastes are regulated under the Federal Resource Conservation and Recovery Act, Comprehensive Environmental Response Compensation and Liability Act, and the Virginia Waste Management Act. These regulations require permits for the transportation, storage, treatment, and disposal of hazardous wastes. All solid and hazardous waste information is entered and stored in the DEQ's updated Comprehensive Environmental Data System.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office

Location: 5636 Southern Boulevard
Virginia Beach, VA 23462

Contact: Jane Workman

Phone: (757) 518-2112

Fax: (757) 518-2123

File Name: Air Pollution Control Program

Description:

The release of air pollutants is regulated under the Clean Air Act and the Virginia Air Pollution Control Law. The Virginia Air Pollution Control Law includes several issues not addressed by the Clean Air Act. These issues include opacity concerns, sources of dust, and odorous emissions. Programs administered by the DEQ include the Existing Sources Registration and Standards, New or Modified Source Construction Permit, Prevention of Significant Deterioration Permit, and Operating Permit (Federal Title V operating permit). All air pollution control information is entered and stored in the DEQ's updated Comprehensive Environmental Data System.

Organization: Virginia Department of Environmental Quality
Tidewater Regional Office

Location: 5636 Southern Boulevard
Virginia Beach, VA 23462

Contact: Kerita Kegler

Phone: (757) 518-2180

Fax: (757) 518-2003

24 Hour Hot Line: (757) 518-2077

File Name: Pollution Response Program

Description:

The Pollution Response Program responds to and investigates pollution complaints. Pollution Response Program personnel are involved in overseeing pollution clean ups. All Pollution Response Program information is entered and stored in the DEQ's updated Comprehensive Environmental Data System.

Organization: Virginia Department of Historic Resources
Location: 2801 Kensington Avenue
Richmond, VA 23221
Contact: Suzanne Durham
Phone: (804) 367-2323, extension 124
Fax: (804) 367-2391

File Name: Archaeological and Historical Site Files

Description:

The files for all archaeological and historical sites in the Commonwealth of Virginia are maintained by this department. Quadrangle maps (7.5 minute series, 1:24,000 scale) show the location of the sites, and information on the sites is kept in individual site file folders. The agency has a listing of state properties on the National Register of Historic Places and those found eligible for such listing. Information on each archaeological site includes some or all of the following:

- Name
- Number
- Type
- Cultural affiliation
- Location
- Owner of site
- Name of surveyor
- Date of survey
- General site surroundings including nearest body of water
- Description of site including dimensions
- Specimens collected
- Current site condition
- Recommendations
- Drawing of the site

Information on historical sites contains some or all of the following items:

- Number
- Location
- Date of construction
- Architectural style
- Construction and cladding material
- Roof type and material
- Roof and porch descriptions
- Major additions and alterations
- Landscape features
- Significance of the structure
- Sketch of the site plan
- Pertinent historical information
- Photographs

Organization: Virginia Institute of Marine Science
Department of Physical Sciences
Location: Greate Road
Route 1208
Gloucester Point, VA 23602
Contact: Dr. John D. Boon
Phone: (804) 684-7272
Fax: (804) 684-7250

Description:

The Virginia Institute of Marine Science has published numerous reports concerning the physical environment in the Port of Hampton Roads and vicinity. Most of these studies involved the collection of field data. Certain data sets have been archived and are available upon request. These reports are listed as follows by category:

BIOTOXICITY

- Bender, M.E. and R.J. Huggett. 1989. Polynuclear aromatic hydrocarbon residues in shellfish: species variations and apparent intraspecific difference. In: Cancer Growth and Progression, (Editor) Hans E. Kaiser, Kluwer Academic Publishers. Pages 226 to 234.
- Bieri, R.H., C. Hein, R.J. Huggett, P. Chou, H. Slone, C.L. Smith, and C.W. Su. 1986. Polycyclic Aromatic Hydrocarbons in Surface Sediments for the Elizabeth River Subestuary. International Journal of Environmental Analytical Chemistry. 26:97 to 26:113.
- Espourteille, F.A., J. Greaves, and R.J. Huggett. 1993. Measurement of tributyltin contamination of sediments and *Crassostrea virginica* in the Chesapeake Bay. Environmental Toxicology and Chemistry 12:305 to 12:314.

- Faisal, M. and R.J. Huggett. 1993. Effects of polycyclic aromatic hydrocarbons on the lymphocyte mitogenic responses in spot, *Leiostomus xanthurus*. *Marine Environmental Research*. 35:121 to 35:124.
- Faisal, M., B.A. Weeks, W.K. Vogelbein, and R.J. Huggett. 1991. Evidence of aberration of the natural cytotoxic cell activity in *Fundulus heteroclitus* (Pisces: Cyprinodontidae) from the Elizabeth River, Virginia. *Veterinary Immunology and Immunopathology*. 29:339 to 29:351.
- Faisal, M., M.S.M. Marzouk, C.L. Smith, and R.J. Huggett. 1991. Mitogen induced proliferative responses of lymphocytes from spot (*Leiostomus xanthurus*) exposed to polycyclic aromatic hydrocarbon contaminated environments. *Immunopharmacology and Immunotoxicology*. 13(3):311 to 327.
- Greaves, J. 1990. Elizabeth River long-term monitoring program-phase 1. 1989. Analysis of Organic Pollutants in Sediments and Blue Crab (*Callinectes sapidus*) Tissues. Final Report: Virginia State Water Control Board, Richmond, Virginia. 222 pages.
- Hargis, W.J., Jr. and D.E. Zwerner. 1984. Effects of contaminated sediments and sediment-exposed effluent water on an estuarine fish: Acute toxicity. *Marine Environmental Research*. 14:337 to 14:354.
- Huggett, R.J., M.E. Bender, and M.A. Unger. 1987. Polynuclear aromatic hydrocarbons in the Elizabeth River, Virginia. In: *Fate and Effects of Sediment-Bound Chemicals in Aquatic Systems*. Edited by K.L. Dickson, A.W. Maki, and W.A. Brungs. Pergamon Press. New York. 449 pages.
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- Roberts, M.H., M.A. Unger, and R.E. Croonenberghs. 1996. Body burden of polycyclic aromatic hydrocarbons and tributyltin in hard clams (*Mercenaria mercenaria*) from the Elizabeth River, Virginia. Final report to Virginia Commission of Marine Resources. 18 pages.
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Organization: Virginia Marine Resources Commission

Location: P. O. Box 756
2600 Washington Avenue
Newport News, Virginia 23607

Contact: Jim Wesson

Phone: (757) 247-2200

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File Name: Conservation and Replenishment Division Information

Description:

The Conservation and Replenishment Division is tasked with the management and replenishment of the public oyster grounds in Virginia. The Division Chief with the assistance of an Advisory Committee develops strategies to improve and restore the public oyster grounds. Restoration activities include the spreading of cultch as oyster setting substrate, rejuvenating of old oyster beds using dredges, creating of oyster reefs for optimal oyster habitat, and the moving of oysters from seed areas to grow-out areas. The Division systematically and scientifically monitors all the restoration activities to determine their success.

Organization: Virginia Marine Resources Commission

Location: P. O. Box 756
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Contact: Gerry Showalter

Phone: (757) 247-2200

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File Name: Engineering/Surveying Department Shellfish Lease Information

Description:

The Engineering/Surveying Department is responsible for surveying and mapping subaqueous ground for public and private shellfish cultivation, leasing private shellfish grounds, and maintaining oyster ground lease records. This includes the accounting for work performed and the annual rent accounting of the leased oyster ground, the platting, and composite mapping of these parcels and the adjacent waters. The department is responsible over 250,000 acres of public ground and 102,000 acres of private ground, and it processes and surveys requests for new leases and transfers of current leases. In cases of disputed claims, the department weighs all available information in making recommendations to the division head for presentation to the Commission.

Organization: Virginia Marine Resources Commission
Location: P. O. Box 756
2600 Washington Avenue
Newport News, Virginia 23607
Contact: Roy Insley
Phone: (757) 247-2200
Fax: (757) 247-8062

File Name: Fisheries Management Division, Plans and Statistics Department
Information

Description:

The Division's Fisheries Plans and Statistics Department monitors Virginia's finfish and shellfish fisheries and provides this information for management purposes. Fishermen report daily harvest to the Division on a monthly basis. Oyster data are gathered from a mandatory Oyster Tax and Harvest Reporting system. These data are entered into computers in the Plans/Statistics office where they can be quickly sorted and retrieved to help in decision making or to respond to data requests from individuals, universities, or other resource management agencies. The Plans/Statistics staff has developed many computer databases for the Marine Fisheries Statistics System and is participating in the setting up of the Federal Northeast Marine Fisheries Information System.

The Plans/Statistics section is also responsible for the development of fisheries management plans, which provide strategic, long-term management recommendations for Virginia's marine fish species. The criteria for setting priorities for fishery management plan development are status of the stock, status of knowledge of the species, and landings volume and value. These plans are based on the best biological and socioeconomic information available.

Organization: Virginia Marine Resources Commission

Location: P. O. Box 756
2600 Washington Avenue
Newport News, Virginia 23607

Contact: Tony Watkinson

Phone: (757) 247-2200

Fax: (757) 247-8062

File Name: Individual Habitat Management Division Permit Files

Description:

Individual permit files for projects involving encroachment over state-owned submerged lands, tidal wetlands, and coastal primary sand dunes within Hampton Roads. Information available related to permit review includes Wetlands Guidelines, Subaqueous Guidelines, Coastal Primary Sand Dune Guidelines, and Laws of Virginia related to Submerged Lands, Wetlands, and Coastal Primary Sand Dunes. Also available is the Local, State, Federal Joint Permit Application.

Organization: Hampton Roads Planning District Commission

Location: 723 Woodlake Drive
Chesapeake, VA 23320

Contact: John W. Whaley

Phone: (757) 420-8300

Fax: (757) 523-4881

File Name: Hampton Roads Data Book

Description:

This is an annual publication containing comprehensive documentation of economic data, including time series data, on the Hampton Roads area. The report is maintained in hard copy and electronic format. It contains numerous "Excel" spreadsheets.

Organization: Hampton Roads Planning District Commission

Location: 723 Woodlake Drive
Chesapeake, VA 23320

Contact: John M. Carlock

Phone: (757) 420-8300

Fax: (757) 523-4881

File Name: Regional Shoreline Study

Description:

This study includes a comprehensive inventory of shoreline conditions (erosion control and access structures), as well as aquatic resources, throughout the Hampton Roads area. All waterbodies in the region are included. It is maintained as a hard copy report (text, tabular data, and maps), hard copy (one of a kind) maps, and low altitude oblique videography.

Organization: Hampton Roads Planning District Commission

Location: 723 Woodlake Drive
Chesapeake, VA 23320

Contact: John M. Carlock

Phone: (757) 420-8300

Fax: (757) 523-4881

File Name: Managing Multiple Recreational Use Conflicts in the Waters of
Hampton Roads

Description:

This study, the first of its kind in Virginia's Coastal Resource Management Program, addresses recreational and commercial boating uses in the waterways of Hampton Roads and the conflicts they impose on one another in terms of safety, on other recreational uses, on natural resources and riparian property. The study examines the existing management framework to deal with water use conflicts and presents a methodology to develop a water use management plan. Using this methodology, the study developed pilot waterway management plans for the Hampton River and the Lynnhaven River.

Organization: Hampton Roads Planning District Commission

Location: 723 Woodlake Drive
Chesapeake, VA 23320

Contact: Dwight L. Farmer or John Crosby

Phone: (757) 420-8300

Fax: (757) 523-4881

File Name: Third Crossing Study

Description:

This study evaluates alternatives for the third crossing of Hampton Roads and is available on CD ROM.

Organization: Hampton Roads Planning District Commission

Location: 723 Woodlake Drive
Chesapeake, VA 23320

Contact: Robert C. Jacobs

Phone: (757) 420-8300

Fax: (757) 523-4881

File Name: Aerial Photography

Description:

The Commission maintains a comprehensive collection of aerial photography covering the period from 1970 to the present, in 5-year increments. Also, partial coverage of the region is available from approximately 1960. Most are 1:12000 scale. The photos are maintained as black and white contact prints.

Organization: City of Norfolk
Department of Information Systems

Location: Suite 300
401 Monticello Avenue
Norfolk, VA 23510-2408

Contact: Charles M. Ragland, GIS Administrator

Phone: (757) 664-4500/Voice mail message (757) 664-4557

Fax: (757) 664-4567

File Name: Geographic Information System Bureau

Description:

The City of Norfolk's Geographic Information System Bureau maintains digital map coverages of the entire City, including Federal, state, and local government map data. Map data is in the form of parcel, planimetric (man-made features), and topographic (including hydrographic and shoreline data) coverages. In addition, the Bureau maintains a library of aerial photographs from 1993, 1996, and 1999. Photos from 1993 and 1996 are contact prints; photos from 1999 are rectified orthophotographs in a geo-referenced, digital format.

Table E-4. INTERNET SITES OF INTEREST, THE PORT OF HAMPTON ROADS
AND VICINITY

Internet address	Description
• http://gis.usace.army.mil/	The home page for the Corps of Engineers Geospatial Data and Systems Program
• http://hlnet.wes.army.mil/library/glossary/	A glossary of hydraulic terms from the Corps of Engineers Waterways Experiment Station, Coastal and Hydraulics Laboratory
• http://ptolemy.gis.virginia.edu/gicdoc/mapper/tigermap.html	The University of Virginia Library Geographic Information Center Interactive Spatial Data Browser
• http://www.deq.state.va.us/~dcr/sw/pubbeach.htm	Information on Virginia's Public Beach Program
• http://www.deq.state.va.us/info/	The home page for the DEQ
• http://www.deq.state.va.us/permits/watperm.html	A discussion of the various water permits handled by the DEQ
• http://www.hal-pc.org/~nugent/port.html	A listing of Internet links to various ports and terminals throughout the world that can provide information on vessel traffic and type of cargo handled
• http://www.ntis.gov/index.html	A listing of scientific, technical, engineering, and related business information documents for sale by the National Technical Information Service

Table E-4. INTERNET SITES OF INTEREST, THE PORT OF HAMPTON ROADS
AND VICINITY
(Cont'd)

Internet address	Description
• http://www.opsd.nos.noaa.gov/	The home page for the National Oceanic and Atmospheric Administration's Center for Operational Oceanographic Products and Services, which includes its Physical Oceanographic Real-Time System (PORTS)
• http://www.opsd.nos.noaa.gov/tideglos.html	A glossary of tide and current terms from the National Oceanic and Atmospheric Administration's Center for Operational Oceanographic Products and Services
• http://www.port-net.com	The home page for the Hampton Roads Maritime Associations' PortNet system
• http://www.portofhamptonroads.com	The home page for the Hampton Roads Maritime Association
• http://www.seaportsinfo.com/portmenu.html	The home page for seaports of the Americas
• http://www.usace.army.mil/inet/functions/cw/cecwa/branches/legislative/leginfo.htm	A listing of legislative information concerning civil works activities conducted by the Corps of Engineers
• http://www.usace.army.mil/inet/functions/cw/index2.mil	The home page for the Corps of Engineers Directorate of Civil Works
• http://www.vims.edu/	The home page for the Virginia Institute of Marine Science
• http://www.wrsc.usace.army.mil/ndc/	The home page for the Corps of Engineers Navigation Data Center

Table E-4. INTERNET SITES OF INTEREST, THE PORT OF HAMPTON ROADS
AND VICINITY
(Cont'd)

Internet address	Description
<ul style="list-style-type: none"> • http://www.wrsc.usace.army.mil/ndc/dredge.htm 	<p>Information on the Corps of Engineers dredging program, including a listing of currently scheduled dredging projects</p>